



Water-Data Report 2006

01466900 GREENWOOD BRANCH AT NEW LISBON, NJ

DELAWARE RIVER BASIN

LOCATION.--Lat 39°57'22", long 74°37'40" referenced to North American Datum of 1983, Pemberton Township, Burlington County, NJ, Hydrologic Unit 02040202, on right bank, 50 ft upstream of bridge on Fourmile Road (County Route 646), 0.1 mi south of New Lisbon, 0.7 mi upstream from mouth, and 3.1 mi east of Pemberton.

DRAINAGE AREA.--77.9 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Occasional miscellaneous discharge measurements, water years 1954, 1973. May 1998 to current year.

REVISED RECORDS.--WDR NJ-03-1: 1998 (M), 2003. WDR NJ-04-1: 2003 (M)

GAGE.--Water-stage recorder. Datum of gage is 34.18 ft above NAVD of 1988.

REMARKS.--Records good, except estimated daily discharges, which are poor. Water diverted for water supply upstream from gage. Satellite rain and gage-height telemetry at station. Several measurements of water temperature were made during the year.

Water-Data Report 2006

01466900 GREENWOOD BRANCH AT NEW LISBON, NJ—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006
DAILY MEAN VALUES
[*e*, estimated]

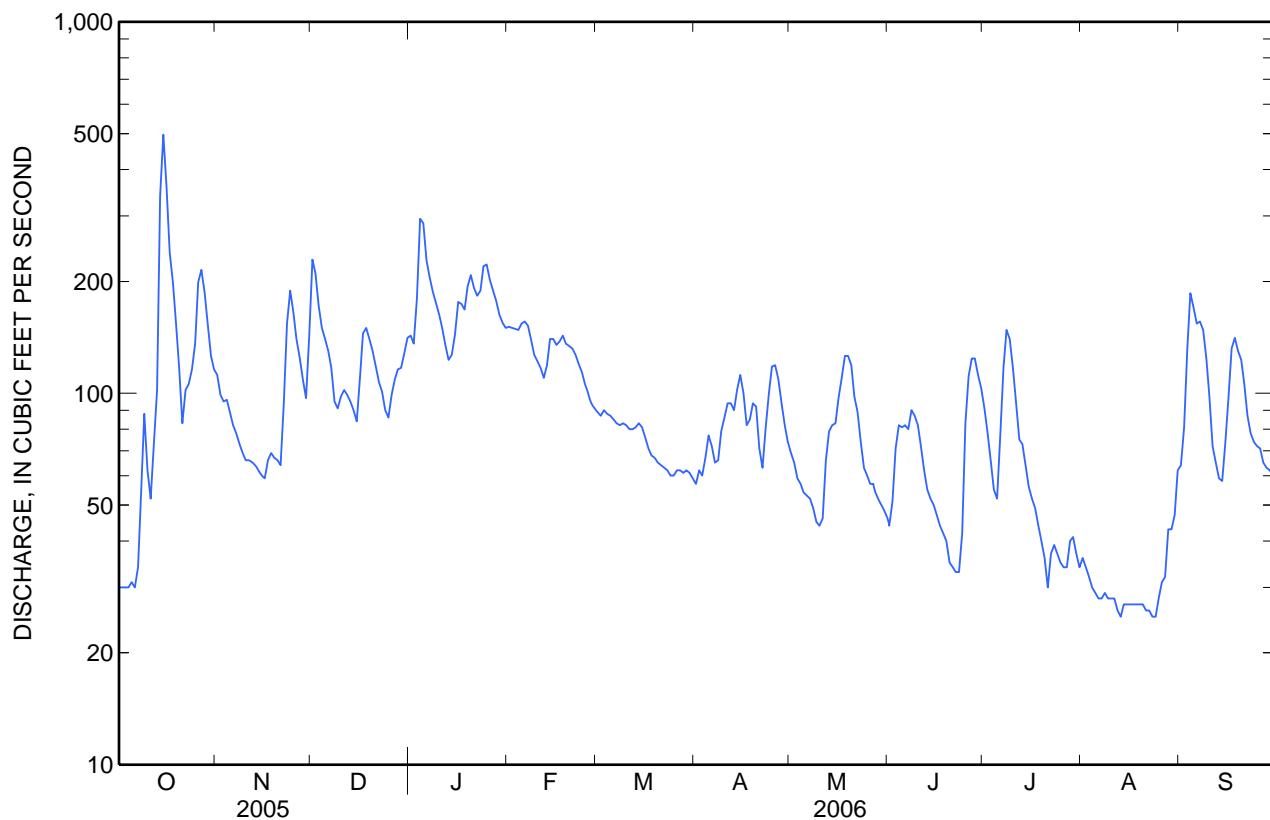
Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	30	112	229	143	151	89	57	69	44	91	36	64
2	30	99	210	136	150	87	62	65	51	78	34	81
3	30	95	172	180	149	90	60	59	71	66	32	132
4	30	96	e150	295	148	88	67	57	82	55	30	186
5	31	89	e140	287	154	87	77	54	81	52	29	170
6	30	82	e130	228	156	85	72	53	82	77	28	154
7	34	78	117	205	152	83	65	52	80	117	28	156
8	55	73	95	188	139	82	66	49	90	148	29	148
9	88	69	91	175	127	83	79	45	87	140	28	124
10	62	66	98	163	122	82	86	44	82	117	28	98
11	52	66	102	149	117	80	94	46	72	94	28	72
12	73	65	99	134	110	80	94	66	62	75	26	65
13	102	64	95	123	119	81	90	79	55	73	25	59
14	340	62	90	127	140	83	102	82	52	64	27	58
15	497	60	84	144	140	81	112	83	50	56	27	73
16	360	59	e110	176	135	76	100	97	47	52	27	97
17	239	66	e145	174	138	71	82	110	44	49	27	132
18	199	69	e150	168	143	68	85	126	42	44	27	141
19	153	67	e140	194	136	67	94	126	40	40	27	130
20	117	66	e130	208	134	65	92	119	35	36	27	123
21	83	64	118	192	132	64	71	98	34	30	26	106
22	102	94	107	183	127	63	63	89	33	37	26	87
23	106	154	101	189	120	62	81	74	33	39	25	78
24	116	189	90	220	114	60	100	63	42	37	25	74
25	136	e165	86	222	106	60	118	60	83	35	28	72
26	199	e140	99	202	100	62	119	57	111	34	31	71
27	215	e125	109	189	94	62	109	57	124	34	32	65
28	187	109	116	177	91	61	94	53	124	40	43	63
29	153	97	117	163	---	62	82	51	112	41	43	62
30	126	143	128	155	---	61	74	49	103	37	47	60
31	116	---	141	150	---	59	---	47	---	34	62	---
Total	4,091	2,783	3,789	5,639	3,644	2,284	2,547	2,179	2,048	1,922	958	3,001
Mean	132	92.8	122	182	130	73.7	84.9	70.3	68.3	62.0	30.9	100
Max	497	189	229	295	156	90	119	126	124	148	62	186
Min	30	59	84	123	91	59	57	44	33	30	25	58

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2006, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	71.5	81.9	96.3	111	114	119	126	82.5	76.4	69.6	54.6	65.3
Max	132	123	164	182	144	184	204	109	162	204	118	121
(WY)	(2006)	(2004)	(2004)	(2006)	(2005)	(2003)	(2004)	(2005)	(2003)	(2004)	(2004)	(1999)
Min	32.8	34.6	29.3	42.4	37.2	48.3	61.8	60.4	39.0	27.6	21.8	28.0
(WY)	(2002)	(1999)	(1999)	(2002)	(2002)	(2002)	(2002)	(2002)	(1999)	(2002)	(2002)	(2002)

SUMMARY STATISTICS

	Calendar Year 2005	Water Year 2006		Water Years 1998 - 2006	
Annual total	40,935		34,885		
Annual mean	112		95.6		89.3
Highest annual mean				125	2004
Lowest annual mean				40.7	2002
Highest daily mean	497	Oct 15	497	Oct 15	925 Jul 14, 2004
Lowest daily mean	30	Sep 28	25	Many days	17 Aug 4, 1999
Annual seven-day minimum	30	Sep 28	26	Aug 18	18 Aug 15, 2002
Maximum peak flow			517	Oct 15	1,080 Jul 13, 2004
Maximum peak stage			5.64	Oct 15	8.91 Jul 13, 2004
Instantaneous low flow			24	Many days	15 Aug 16, 2002
10 percent exceeds	189		163		155
50 percent exceeds	110		83		79
90 percent exceeds	38		34		32



WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 2001 to current year.

REMARKS.--Total nitrogen (00600) equals the sum of filtered ammonia plus organic nitrogen (00623), filtered nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570). Bacteria samples were collected synoptically over a 30-day period during the summer.

COOPERATIVE NETWORK SITE DESCRIPTOR: Undeveloped Land Use Indicator and Low-Level Mercury Assessment special study site, New Jersey

Department of Environmental Protection (NJDEP) Watershed Management Area 19. The sample on Sep. 28, 2005 was for the low-level mercury assessment.

COOPERATION.--Physical measurements and samples for laboratory analyses were provided by personnel of the NJDEP. Bacteria samples were provided by the local county health department under the direction of the NJDEP through the County Environmental Health Act. Determinations of filtered ammonia, filtered orthophosphorus, BOD, total suspended residue, fecal coliform, E. coli, and enterococcus bacteria were performed by the NJ Department of Health and Senior Services.

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005**

Part 1 of 2

Date	Time	Sample type	Turbdty white Instan- taneous dis- charge, cfs (00061)	light, det ang 90+/-30 corrctd	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, uS/cm 25 degC (00095)	Temper- ature, wat unf air, deg C (00020)	Temper- ature, water, deg C (00010)	Mercury water filtrd, low level, ng/L (50287)
Sep 28...	1110	Field Blank	--	--	--	--	--	--	--	--	--	.04
Sep 28...	1140	Environmental	29	4.3	767	9.2	94	4.7	53	24.0	17.0	.92

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006**

Part 1 of 3

[Remark codes: <, less than; E, estimated.]

Date	Time	Turbdty white Instan- taneous dis- charge, cfs (00061)	UV absorb- ance, 254 nm, 90+/-30 wat flt corrctd	UV absorb- ance, 280 nm, wat flt units /cm (50624)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, uS/cm 25 degC (00095)	Temper- ature, wat unf air, deg C (00020)	Temper- ature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO ₃ (00900)	
Dec 01...	1030	233	2.6	.537	.413	761	8.6	75	4.2	64	8.5	9.3	5
Feb 16...	1000	134	1.8	.410	.315	771	10.7	82	4.3	62	12.0	4.5	5
Jun 08...	1000	90	5.0	.572	.453	759	7.2	75	4.3	57	19.5	17.3	5
Aug 22...	0930	26	3.8	.348	.283	766	7.8	83	4.6	53	26.5	19.2	5

01466900 GREENWOOD BRANCH AT NEW LISBON, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 2 of 3

[Remark codes: <, less than; E, estimated.]

Date	ANC, wat unf								Residue on evap.		Residue total		Ammonia + Ammonia water, filtrd,	
	Calcium water, filtrd, mg/L (00915)	Magnes- ium, water, filtrd, mg/L (00925)	Potas- sium, water, filtrd, mg/L (00935)	Sodium, water, filtrd, mg/L (00930)	fixed end pt, lab, mg/L as CaCO ₃ (90410)	Chlor- ide, water, filtrd, mg/L (00940)	Fluor- ide, water, filtrd, mg/L (00950)	Silica, water, filtrd, mg/L (00955)	Sulfate water, filtrd, mg/L (00945)	180degC wat flt mg/L (70300)	sus- pended, mg/L (00530)	at 105 deg. C, mg/L (00623)	org-N, water, filtrd, mg/L (00608)	Ammonia as N mg/L (00623)
Dec 01...	1.05	.628	.83	4.22	--	6.33	<.10	4.5	8.49	44	2	.29	.016	
Feb 16...	.91	.549	.58	4.32	--	6.76	<.10	4.1	9.43	42	1	.25	.031	
Jun 08...	.94	.526	.75	4.65	--	7.55	<.10	4.1	6.16	44	5	.32	.067	
Aug 22...	1.06	.640	.80	5.21	<5	8.28	<.10	5.4	5.76	31	2	.16	.031	

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 3 of 3

[Remark codes: <, less than; E, estimated.]

Date	Nitrite + nitrate water, filtrd, mg/L as N (00631)	Partic- ulate nitro- gen, water, filtrd, mg/L (49570)	Total nitro- gen, water, unfiltrd mg/L (00602)	Total nitro- gen, water, unfiltrd mg/L (00600)	Ortho- phos- phate, water, filtrd, mg/L as P (00671)	Phos- phorus, water, filtrd, mg/L (00666)	Phos- phorus, water, unfiltrd mg/L (00665)	Total carbon, susnd sediment mg/L (00694)	Inor- ganic carbon, susnd sediment mg/L (00688)	Organic carbon, susnd sediment mg/L (00689)	Organic carbon, water, filtrd, mg/L (00681)	BOD, water, unfiltrd 5 day, mg/L (00310)	Boron, water, filtrd, ug/L (01020)
	<.06	.05	--	--	E.005	.010	.062	.7	<.1	.7	10.7	<1.0	11
Dec 01...	<.06	.05	--	--	E.005	.010	.062	.7	<.1	.7	10.7	<1.0	11
Feb 16...	.07	.05	.31	.37	.015	.009	.013	.4	<.1	.4	7.4	<1.4	8.6
Jun 08...	E.04	.20	--	.56	.010	.021	.055	3.5	<.1	3.5	9.0	<1.0	10
Aug 22...	.10	.07	.26	.33	.010	E.004	.054	1.3	<.1	1.3	4.2	E1.2	11

01466900 GREENWOOD BRANCH AT NEW LISBON, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006
[Remark codes: <, less than.]

Date	Time	Instan- taneous dis- charge, (00061)	Temper- ature, water, deg C (00010)	Enter- coccii,		E coli, MF, water, col/ (31649)	Fecal coli- form, MF, water, col/ (31633)	ECbroth MPN/ (31615)
				m-E	100 mL			
May								
03...	0945	59	14.2	<10	<10	<20		
10...	0938	44	14.2	10	<10	<20		
17...	0930	108	15.6	60	20	110		
24...	0950	62	14.8	<10	10	<20		
31...	0930	47	21.0	10	<10	<20		